WHAT IS CLAIMED IS:

1. A method for analyzing data in a computer-implemented data mining system, comprising:

(a) generating a data model in the computer-implemented data mining system, wherein the data model comprises a Gaussian Mixture Model that stores transactional data; and

(b) mapping the data model in the computer-implemented data mining system to aggregate the transactional data for cluster analysis.

2. The method of claim 1, wherein the cluster analysis groups the transactional data into coherent groups according to perceived similarities in the transactional data.

3. The method of claim 1, wherein the data model includes a basket table that contains summary information about transactions, an item table that contains information about individual items purchased by customers, and a department table that contains aggregate information about transaction sales by store department.

4. A computer-implemented data mining system for analyzing data, comprising:

(a) a computer;

(b) logic, performed by the computer, for:

(1) generating a data model, wherein the data model comprises a Gaussian Mixture Model that stores transactional data; and

(2) mapping the data model to aggregate the transactional data for cluster analysis.

5. The system of claim 4, wherein the cluster analysis groups the transactional data into coherent groups according to perceived similarities in the transactional data.

6. The system of claim 4, wherein the data model includes a basket table that contains summary information about transactions, an item table that contains information about individual items purchased by customers, and a department table that contains aggregate information about transaction sales by store department.

7. An article of manufacture embodying logic for analyzing data in a computer-implemented data mining system, the logic comprising:

(a) generating a data model in the computer-implemented data mining system, wherein the data model comprises a Gaussian Mixture Model that stores transactional data; and

(b) mapping the data model in the computer-implemented data mining system to aggregate the transactional data for cluster analysis.

8. The article of manufacture of claim 7, wherein the cluster analysis groups the transactional data into coherent groups according to perceived similarities in the transactional data.

9. The article of manufacture of claim 7, wherein the data model includes a basket table that contains summary information about transactions, an item table that contains information about individual items purchased by customers, and a department table that contains aggregate information about transaction sales by store department.